

Permit Modification Fact Sheet

General Information

| | |
|-----------------|----------------------|
| Permit Number: | WI-0039527-08-1 |
| Permittee Name: | Weyauwega Star Dairy |
| Address: | PO Box 658 |
| City/State/Zip: | Weyauwega, WI 54983 |

Facility Description

This facility manufactures specialty cheeses which include colby, Monterey jack, mozzarella, provolone, parmesan, romano, pepper, garden vegetable, and curds. The plant processes approximately 191,000 pounds of milk per day into about 20,500 pounds of cheese each day. Production processes include pasteurization, fat removal, cheese production, pressing, brining and packaging. The plant operates 12 hours per day, 5 days per week and 12 months per year. They produce approximately 5 million pounds of cheese per year. No formal wastewater treatment facility exists on site. The average daily flow of municipal water supplied to the facility is 12,110 gallons. Approximately 6,000 gallons per day of non-contact cooling water is discharged to Lake Weyauwega via city storm sewer (Outfall 001). Approximately 11,800 gallons per day of factory equipment cleanup wastewater is land applied on department approved sites (Outfall 002). The plant maintains a 20,000-gallon underground storage tank to hold wastewater prior to land application.

| Sample Point Designation | | |
|--------------------------|---|---|
| Sample Point Number | Discharge Flow, Units, and Averaging Period | Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable) |
| 001 | Unchanged by modification. | Representative samples of noncontact cooling water sampled prior to discharge to Weyauwega Lake via storm sewer |
| 002 | Unchanged by modification. | Representative samples of process wastewater (salt pressings, brine, washwater, boiler condensate & whey permeate) sampled prior to landspreading. |
| 004 | New Land Application Sample Point | The 1.3 million gallon storage unit located at E7156 Garrity Rd, Manawa, WI is to be used for the storage of only liquid industrial wastewater generated by Weyauwega Star Dairy. Representative samples of wastewater from the storage unit shall be sampled prior to landspreading. |

1 Surface Water - Proposed Monitoring and Limitations

Sample Point Number: 001- NCCW TO WEYAUWEGA LAKE

| Monitoring Requirements and Limitations | | | | | |
|---|------------|-----------------|------------------|-------------|-------|
| Parameter | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes |
| Flow Rate | | gpd | Quarterly | Total Daily | |

Changes from Previous Permit:

Unchanged by modification.

Explanation of Limits and Monitoring Requirements

Water Quality Based Limits and WET Requirements and Disinfection (if applicable)

Unchanged by modification.

Categorical Limits

Unchanged by modification.

2 Land Application - Sludge/By-Product Solids (industrial only)

Sample Point Number: 002- PROCESS WW TO LANDSPREADING

| Monitoring Requirements and Limitations | | | | | |
|---|------------|-----------------|------------------|-------------|-------|
| Parameter | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes |
| Flow Rate | | gpd | Monthly | Total Daily | |
| Nitrogen, Total Kjeldahl | | mg/L | Quarterly | Grab | |
| Chloride | | mg/L | Quarterly | Grab | |
| BOD5, Total | | mg/L | Annual | Grab | |

Changes from Previous Permit:

Unchanged by modification.

Explanation of Limits and Monitoring Requirements

Unchanged by modification.

Sample Point Number: 004- STORAGE UNIT WW TO LANDSPREAD

| Monitoring Requirements and Limitations | | | | | |
|---|------------|-----------------|------------------|-------------|---|
| Parameter | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes |
| Nitrogen, Total Kjeldahl | | mg/L | Quarterly | Grab | Sampling only required when landspreading occurs. |
| Nitrogen, Organic Total | | mg/L | Quarterly | Grab | Sampling only required when landspreading occurs. |
| Phosphorus, Total | | mg/L | Quarterly | Grab | Sampling only required when landspreading occurs. |
| Phosphorus, Water Extractable | | % of Tot P | Quarterly | Grab | Sampling only required when landspreading occurs. |
| Chloride | | mg/L | Quarterly | Grab | Sampling only required when landspreading occurs. |
| Potassium, Total Recoverable | | mg/L | Quarterly | Grab | Sampling only required when landspreading occurs. |

Changes from Previous Permit:

This is a new land application sample point to be used for landspreading from the storage structure located at E7156 Garrity Rd in Manawa, WI.

Explanation of Limits and Monitoring Requirements

Requirements for land application of industrial sludge are determined in accordance with ch. NR 214, Wis. Adm. Code.

WATER EXTRACTABLE PHOSPHORUS

Water extractable phosphorus (WEP) is the coefficient for determining plant available phosphorus from measured total phosphorus. In Wisconsin, the Penn State Method is utilized and is expressed in percent. While a total P may be significant, the WEP may show that only a small percentage of the P is available to plants because of factors such as treatment processes and chemical addition that “tie-up” phosphorus limiting the amount of phosphorus that is plant available. As part of the Wisconsin’s nutrient management plan (NMP) requirements, the accounting of all fertilizers must be included over the NMP cycle. The fertilizer value of the waste needs to be communicated to the farmer and accounted for in the NMP.

3 Compliance Schedules

3.1 Land Application Management Plan

A management plan is required for the land application system.

| Required Action | Due Date |
|---|------------|
| Land Application Management Plan: Submit an update to the management plan to optimize the land application system performance and demonstrate compliance with Wisconsin Administrative Code NR 214. | 11/30/2020 |

Explanation of Compliance Schedules

A compliance schedule has been included to require an update of the land application management plan prior to the implementation of new off-site storage operations.

Proposed Expiration Date:

Unchanged by modification.

Prepared By:

Sarah Donoughe
Wastewater Specialist

Date: August 19, 2020